

Response to Comments – Distringas of Massachusetts, LLC

INTRODUCTION

In accordance with the provisions of 40 CFR §124.17, this document presents the U.S. Environmental Protection Agency's (EPA's) responses to comments (RTC) received on the Draft NPDES Permit (MA0020010). The RTC explains and supports EPA's determinations that form the basis of the Final Permit. The original Distringas of Massachusetts LLC (Distringas) draft permit public comment period began July 7, 2009, and ended on August 19, 2009. EPA received a request to extend the comment period from the Mystic River Watershed Association in a letter dated July 28, 2009. EPA extended the public comment period an additional 14 days to August 19, 2009 and reissued a public notice on August 3, 2009.

Comments were received from:

1. Mr. Frank DiLiberto, Environmental Manager, Distringas of Massachusetts LLC (Distringas);
2. Ms. Cynthia Liebman, Conservation Law Foundation, Massachusetts Advocacy Center (CLF);
3. Mr. EkOngKar Singh Khalsa, Executive Director, Mystic River Watershed Association (MyRWA).

After a review of the comments received, EPA and MassDEP have made a final decision to issue this permit authorizing this discharge. The Final Permit generally takes the same fundamental approach as the Draft Permit that was available for public comment. EPA's decision-making process has benefited from the various comments and additional information submitted, and EPA has made certain revisions to the permit in response. These improvements and changes are detailed in this document and reflected in the Final Permit. In addition, administrative and formatting changes have been made in places throughout the Final Permit for consistency. A summary of the changes made in the Final Permit is provided below. The analyses underlying these changes are explained in the responses to individual comments. Since the Fact Sheet is a final document, no changes were made to the document. Instead, Fact Sheet comments were noted, and responses to them are included in this document.

The Final Permit and this response to public comments are available on EPA's web site at epa.gov/region01/npdes. Copies of the Final Permit also may be obtained by writing or calling EPA's Industrial Permits Branch (CIP), Office of Ecosystem Protection, 1 Congress Street, Suite 1100, Boston, MA 02114-2023; Telephone: (617) 918-1586.

This permit is being jointly issued by EPA and MassDEP. EPA will generally present responses to comments as EPA's, unless there are particular issues in which MassDEP plays a unique role beyond being a co-issuer of this permit. For most responses where

EPA is the agency presenting the response, MassDEP's certification and joint issuance of the permit will establish that the Department agrees with EPA's response.

As mentioned previously, the Final Permit has changed from the Draft Permit based on comments received during the public comment period and these changes are summarized below. The analyses underlying these changes are explained in the responses to individual comments. Each change made in response to a comment or comments is followed by a number that correlates to a specific response.

1. Part I.A.1 has been changed to "Such discharge shall: 1) be limited and monitored at slack low tide during a wet weather event, unless specified to be monitored at slack low tide during a dry weather event; and 2) not cause or contribute to a violation of the State Water Quality Standards of the receiving water. Flow rate, temperature, and cyanide shall be monitored during a dry weather event as specified below". (Comment 1.2 and Comment 2.3)
2. Throughout the permit, any reference to free available cyanide has been replaced by cyanide. Sampling requirements listed in Part I.A.1 includes Cyanide (Total, ug/L) for both wet weather and dry weather. (Comment 1.5)
3. Footnote 1 in Part I.A.1, changed to "Samples shall be collected at the detention basin (SD-6) as illustrated in Figure 1 of the Fact Sheet. Any change in sampling location(s) must be reviewed and approved in writing by EPA and MassDEP. EPA considers quarters as follows: January to March; April to June; July to September; and October to December. For this purpose, slack low tide is defined as the period of time during which tidal-influenced waters are relatively still during the turn of the low tide about one hour prior to and about one hour after low tide." (Comment 2.3)
4. Footnote 3 included in Part I.A.1 has been changed as follows: "Dry weather samples shall be collected after a minimum of a 24-hour antecedent period of no more than 0.1 inches of precipitation for each quarter. Wet weather samples shall be collected from a storm event that is greater than 0.1 inches in magnitude and produces a discharge within the storm drain system during the first hour of the rain event during slack low tide. The Permittee shall record the date and duration (in hours) of the discharge event(s) sampled, daily rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff, and the end of the previous measurable (greater than 0.1 inch rainfall) storm event." (Comment 3.1)
5. Added Footnote 4 in Part I.A.1, "Flow rate shall be estimated in accordance with good engineering practices and shall, at a minimum, include measurement of flow velocity and flow depth to calculate flow in millions of gallons per day (MGD)." (Comment 3.3)
6. Added as Footnote 5 in Part I.A.1, "After collection of two consecutive quarterly samples exceeding 50 mg/L, the Permittee shall review the selection, design, installation, and implementation of BMPs to control sediment under the SWPPP. If necessary, the Permittee shall make modifications to the SWPPP after implementation of proposed control measures to abate sediment loading as required under Part I.B.7." (Comment 2.5)

7. A requirement for an annual Priority Pollutant scan has been added to the table in Part I.A.1 of the permit along with a new Footnote 6. Footnote 6 states: “The Permittee shall analyze grab samples for all NPDES Priority Pollutants (PPs) annually within the 4th quarter (October to December). Currently, the PPs include 126 toxic chemicals, which can be found at 40 CFR Part 423, Appendix A. All samples shall be tested using NPDES approved EPA analytical methods found in 40 CFR §136. A grab sample shall be taken at SD-6 (Detention Basin) during a wet weather event (a storm event that is greater than 0.1 inches in magnitude and produces a discharge within the storm drain system during the first hour of the rain event) during slack low tide. The Permittee shall report the analytical results in units of micrograms per liter (ug/l) for each PP by attaching the report to the DMR and report the results for the 14 PPs (listed in the table above) directly on the DMR. The results of the 4th quarter sampling are due before January 15.” (Comment 2.2 and Comment 4.2)
8. Footnote 7 included in Part I.A.1 has been added as follows: “Event total rainfall shall be obtained for the wet weather event during which samples were collected per quarter. Rainfall data shall be obtained from the NOAA KBOS (Boston Logan International Airport) station.” (Comment 3.2)
9. An annual sampling requirement for bacteria (Enterococcus) has been added to the table in Part I.A.1 of the permit. Footnote 8 has been added as follows: “A sample shall be collected for analysis of Enterococcus (bacteria) in the 3rd quarter (July to September) during a wet weather event.” (Comment 4.1)
10. Table at Part I.A.1, Cyanide (total, ug/L)-wet sample type has been changed from “composite/grab” to “grab”. (Comment 1.5 and Comment 3.1)
11. Part I.A.3 has been revised to state: The effluent shall not cause the receiving surface water to contain pollutants in concentrations or combinations that are toxic to humans, aquatic life, or wildlife (Comment 1.2)
12. In Part I.B.2, the following clarification has been inserted “...including a description of the proposed methodology of the Storm Drain Evaluation (special study) required in Part I.B.5...” In addition, in Part I.B.2, the timeframe for submitting the SWPPP to EPA and Mass DEP has been changed to ninety days, consistent with the certification requirement timeframe. (Comment 5.1 and Comment 5.3)
13. Part I.B.5 has been modified as follows: “The SWPPP shall specifically address cyanide loading from both overland runoff flow and from groundwater infiltration to the storm drain system. The Permittee shall include in the SWPPP proposed methodologies for the Storm Drain Evaluation (special study) and shall submit the complete, certified SWPPP to EPA and MassDEP within ninety (90) days of the effective date of the Permit. The Storm Drain Evaluation (special study) shall include all studies, sampling and analyses necessary to develop site-specific BMPs necessary to limit and/or prevent the introduction of free cyanide into the storm drain system. These site-specific BMPs shall be measures to control, reduce, and/or eliminate cyanide concentrations within the storm drain discharge. In addition, the Storm Drain Evaluation shall require evaluation of a mixing zone/dilution factor within the tidal-influenced Mystic River using an appropriate

- method or model. The Permittee shall submit the completed the Storm Drain Evaluation (special study) to EPA and MassDEP within one (1) year from the effective date of this Permit, and the Permittee shall begin implementation the BMPs developed in the Storm Drain Evaluation (special study) no later than one (1) year after the effective date of this Permit. The site-specific BMPs shall be prepared in accordance with good engineering practices, identify potential sources of cyanide to the storm drain system that may reasonably be expected to affect the quality of the stormwater discharge, and describe the practices which will be used to reduce cyanide concentrations and assure compliance with this permit. Within three (3) years from the effective date of this Permit, the Permittee shall implement the site-specific BMPs to control, reduce, and/or eliminate cyanide within the storm drains. Within four (4) years from the effective date of this Permit, the Permittee shall validate the effectiveness of these BMP through sampling and analysis (Comment 5.1, Comment 5.3, and Comment 5.4)
14. Part I.B.6 has been changed as follows, “Each inspection must include a visual assessment of stormwater samples (collected from SD-6, the detention basin), which shall be collected during the first hour of discharge from a storm event during slack low tide, stored in a clean, clear glass or plastic container, and examined in a well-lit area for the following water quality characteristics: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of pollution.” (Comment 2.3)
 15. Part I.B.9 has been added as follows, “The Permittee must retain a copy of the current SWPPP required by the permit at the facility. Unless prohibited by law, the SWPPP must be immediately available to EPA; MassDEP; a local agency that reviews stormwater management plans; the operator of an MS4 receiving discharges from the site; and representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) at the time of an onsite inspection or upon request. EPA may provide access to portions of the Permittee’s SWPPP to a member of the public upon request. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within EPA, USFWS, or NMFS.” (Comment 5.5)
 16. Part I.B.10 has been added as follows, “This permit may be modified in accordance with 40 CFR §122.62(a)(2) and Part II.A.4 to incorporate additional requirements, including new and/or additional specific best management practices or numerical effluent limits, based on the results of the Storm Drain Evaluation.” (Comment 2.8)
 17. Part I.C has been changed as follows “The results of the annual Priority Pollutant monitoring shall be attached to the DMR for the month of December.” (Comment 4.2)

In addition, the following administrative and format changes were in the Final Permit:

18. Throughout the permit, references have been adjusted to indicate Part I of the permit includes effluent limitations, monitoring requirements, and state permit conditions.
19. Page 1 has been changed to “This permit shall become effective on the first day of the calendar month immediately following sixty (60) days after signature.”

20. Page 1 has been changed to “This permit consists of 9 pages in Part I including effluent limitations, monitoring requirements, and state permit conditions, and 25 pages in Part II, Standard Conditions.”
21. On Page 1, the required EPA signature on the first page of the permit has been changed from Stephen S. Perkins to Kenneth Moraff, Acting Director of the Office of Ecosystem Protection.

RESPONSE TO COMMENTS ON THE DRAFT NPDES PERMIT

In this response to comments document, EPA has structured the responses using the topic outline presented below. EPA grouped together supporting and opposing comments concerning each set of issues where EPA received comments. This outline is designed to structure EPA’s responses and make them more accessible to the interested public.

1. General Concerns
2. Permit Compliance
3. General Sampling
4. Monitoring Parameters
5. Stormwater Pollution Prevention Plan
6. General Fact Sheet Comments

1.0 General Concerns

- 1.1 CLF Comment: CLF suggests a provision that the Permittee upload monitoring data to [the WQX] database as it is submitted to EPA, so that it can be more readily available to the public.

Response to Comment 1.1: The permit requires Distrigas to submit discharge monitoring report (DMR) forms to EPA documenting sampling and analysis results obtained from SD-6 (Detention Basin), located at the facility. DMR data submitted by Distrigas is input into the Integrated Compliance Information System (ICIS) database, the EPA database for NPDES permitting and compliance. EPA is not requiring the Permittee to provide compliance data in multiple formats.

In addition, the WQX database provides a repository of ambient surface water quality monitoring data. In this case, the required compliance monitoring is not ambient surface water monitoring, but rather it is monitoring at the assessable point within the facility that is most representative of the discharge (at SD-6). It is possible that, to satisfy the requirement in Part I.B.5 to evaluate a mixing zone/dilution factor within the Mystic River, the Permittee may collect surface water samples from the Mystic River. If so, EPA encourages Distrigas to upload these ambient surface water results to the WQX database.

- 1.2 CLF Comment: The permit itself is lacking language used to protect state water quality standards. Therefore, CLF suggests the permit be amended to contain the

following language in Part A.1 under Effluent Limitations and Monitoring Requirements: “Discharges shall: 1) be limited and monitored by the Permittee as specified below; and 2) not cause (or contribute to) a violation of the State Water Quality Standards of the receiving water.”

Distrigas Comment: Change the condition [Condition A.3] to read: “The effluent after it has been diluted in the receiving water body shall not contain materials in concentrations or in combinations which are hazardous or toxic to aquatic life or which would impair the uses designated by the classification of the receiving waters.”

Response to Comment 1.2: Part I.A.3 of the draft permit states “The effluent shall not contain materials in concentrations or in combinations which are hazardous or toxic to aquatic life or which would impair the uses designated by the classification of the receiving waters.” The condition in the draft permit refers to implementation of effluent limits consistent with requirements of the Massachusetts Water Quality Standards (314 CMR 4.05(5)(e)) which states “All surface water shall be free from pollutants in concentrations or combinations that are toxic to humans, aquatic life, or wildlife.”

To clarify the requirements that the permitted discharge shall not cause or contribute to a violation of the State Water Quality Standards of the receiving water (including consideration of the mixing zone provisions of the State Water Quality Standards), EPA has modified the permit condition (Part I.A.3 of the Draft Permit). The modified condition in the Final Permit reads “The effluent shall not cause the receiving surface water to contain pollutants in concentrations or combinations that are toxic to humans, aquatic life, or wildlife.” In addition, EPA agrees with the comment from CLF and has modified the language in Part I.A.1 to read “Such discharge shall: 1) be limited and monitored at slack low tide during a wet weather event, unless specified to be monitored at slack low tide during a dry weather event; and 2) not cause or contribute to a violation of the State Water Quality Standards of the receiving water.”

- 1.3 MyRWA Comment: Finally, we request that EPA include language in this permit urging Distrigas of Massachusetts LLC to work with neighboring corporations and the City of Everett to produce a comprehensive drain plan of the underground infrastructure of the entire former manufactured gas plant located underneath and around the Distrigas site as these pipes were installed by private parties in the distant past and no comprehensive plan of this infrastructure exists today. Such a plan would aid all involved parties in identifying and addressing potential and actual discharges of pollutants into the Mystic River.

Response to Comment 1.3: EPA agrees that such a plan could aid all involved parties in identifying and addressing potential and actual

discharges of pollutants into the Mystic River. EPA encourages cooperation between Distrigas and the City of Everett to produce a comprehensive drain plan of underground infrastructure. Distrigas has included mapping of the existing storm drain system at the facility as part of the application process required under 40 CFR §122.26(c). EPA is not including further cooperation as a NPDES permit requirement, however, as discussed in Response 5.5, EPA is providing for the availability of the SWPPP describing the investigation of the facility drainage.

- 1.4 Distrigas Comment: Change the first sentence as follows: “All samples shall be tested using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA ~~in accordance with the procedures in 40 CFR §~~ [Note that strikeouts are included within the Distrigas comment).”

Response to Comment 1.4: Distrigas proposed the change to permit language to allow for testing of free cyanide using a currently unapproved draft methodology. As acknowledged in Response 1.5, the Final Permit shall require sampling for total cyanide. If the Permittee proposed a methodology for analysis of total cyanide not currently approved by EPA, the Permittee shall follow procedures within 40 CFR §136 that allow for approval of alternative proposed test procedures (40 CFR §136.5(a)).

- 1.5 Distrigas Comment: “We propose to analyze the effluent for free cyanide by the new EPA Method 9016.”

Distrigas Comment: Distrigas suggested several changes to the permit including specifying “free cyanide”.

Response to Comment 1.5: In Part I.A.1 of the Draft Permit, EPA required quarterly sampling for “Cyanide (Free Available Cyanide, ug/L)” during both wet weather and dry weather events. Upon consideration of this comment and an investigation of the appropriate form of cyanide testing to require, the permit has been modified. The Final Permit requires monitoring for total cyanide rather than free available cyanide as required under Section 304(a) of the Clean Water Act (CWA). As stated in the Nationally Recommended Water Quality Criteria Table¹, “This recommended water quality criterion is expressed as total cyanide, even though the IRIS RFD [Integrated Risk Information System reference dose] we [EPA] used to derive the criterion is based on free cyanide. The multiple forms of cyanide that are present in ambient water have significant differences in toxicity due to their differing abilities to liberate the CN-moiety. Some complex cyanides require even more extreme conditions than refluxing with sulfuric acid to liberate the CN-moiety. Thus, these complex cyanides are expected to have little or no

¹ USEPA, National Recommended Water Quality Criteria, Priority Pollutants, footnote jj.

'bioavailability' to humans. If a substantial fraction of the cyanide present in a water body is present in a complexed form (e.g., $\text{Fe}_4[\text{Fe}(\text{CN})_6]_3$), this criterion may be over conservative.” Throughout the Final Permit, sampling for total cyanide shall be completed using approved methods under 40 CFR §136 or other methods approved by EPA after proposal of an alternative method by the Permittee as required under 40 CFR §136.5(a).

2.0 Permit Compliance

- 2.1 Distrigas comment: “The reference to “dry weather” free cyanide testing [Part A.1 of the Permit] should be removed because dry weather free cyanide testing will be performed as part of the “Special Study.” The results of the dry weather testing will be used to evaluate whether this potential pathway for free cyanide to enter the stormwater drainage system exists and the magnitude of the flux associated with this pathway.”

Distrigas comment: “Delete the monitoring requirements for : “Flow Rate (MGD)-dry³”, “Cyanide (Free Available cyanide),ug/L-dry³”.

Response to Comment 2.1: Distrigas is permitted to discharge not only stormwater, but also process wastewater, including water condensate from LNG vaporizers, fire test water, boiler blowdown, and hot water heater drainage through Outfall No. 001. Since the facility discharges process wastewater during dry period events, the Permit will require both wet and dry weather monitoring.

Dry weather cyanide is a permit condition separate from the Storm Drain Evaluation (special study) required by the permit. The Permittee may submit analyses from results obtained during the special study for dry weather cyanide results as long as the requirements for dry weather conditions (Part I.A.1) also are met.

For comments referring to free cyanide, please see Response 1.5.

- 2.2 Distrigas comment: Delete the monitoring requirements for “Total Cyanide (as CN) (mg/L)” under Condition A.1.

Response to Comment 2.2: The monitoring requirement for total cyanide in Condition A.1 of the draft permit was based on historic priority pollutant scans described in Section 6.4.8 of the Fact Sheet. As described in Section 6.4.8 of the Fact Sheet, Distrigas was required to conduct annual sampling for 126 EPA Priority Pollutants under the previous permit. Fourteen parameters were detected in concentrations above detection limits as reported in DMRs submitted to EPA. In the draft permit, EPA proposed reducing the number of priority pollutants of the

annual scan to 14 parameters; one of these remaining parameters was total cyanide. Therefore, given the historic contamination at the site as described in Section 6.2.4 of the Fact Sheet, the requirement to monitor for total cyanide shall remain in the permit.

Additionally, the permittee is required to sample SD-6 (Detention Basin) for the 126 EPA Priority Pollutants as defined in 40 CFR §423, Appendix A, during the 4th quarter (October to December) on an annual basis as described in Part I.A.1 of the Permit. The permittee shall include the Priority Pollutant sampling results as an attachment to the December DMR, and report the monitoring results on the DMR of the fourteen parameters detected in concentrations above detection limits, as specified in the Table in Part I.A.1 and Footnote 6.

- 2.3 CLF Comment: CLF urges EPA to include in the final permit a requirement for all monitoring to occur at slack low tide. If this provision is already intended to be in the draft permit and applicable to all monitoring, then we ask that it be clarified.

Response to Comment 2.3: EPA agrees that both dry weather and wet weather monitoring as included in Part I.A.1 shall be conducted as slack low tide. EPA has revised the language as follows: “Such discharge shall: 1) be limited and monitored at slack low tide during a wet weather event, unless specified to be monitored at slack low tide during a dry weather event; and 2) not cause or contribute to a violation of the State Water Quality Standards of the receiving water. Flow rate, temperature, and cyanide shall be monitored during a dry weather event as specified below” Further, for this purpose EPA has defined “slack low tide” in Footnote 1 of Part I.A.1 as the period of time during which tidal-influenced waters are relatively still during the turn of the low tide about one hour prior to and about one hour after low tide. In addition, EPA has modified the language of Part I.B.6 to indicate that sample collection associated with quarterly inspections also shall be conducted at slack low tide.

- 2.4 CLF Comment: Wet and dry weather [temperature] monitoring ought to be required in the Distrigas permit to assess whether the assumption that the entire volume of water will be elevated by no more than 1 degree or 3.2 during summer and winter, respectively, is borne out and whether short bursts of highly heated water may be discharged with little or no dilution into the Mystic.

Response to Comment 2.4: EPA provided calculations in Attachment C of the Fact Sheet documenting the reasonable potential analysis for exceedance of water quality standards for temperature. The calculations assumed conservative factors including

- 1) 7Q10 flow of the Mystic River;
- 2) No heat dispersion in the storm drain system; and

3) Maximum temperature discharges at maximum production flow rates.

EPA considered the potential temperature influences assuming these conservative factors and determined that, based on available information, there was not a reasonable potential for exceedances of temperature Surface Water Quality Standards in the receiving water due to the discharge.

Thermal discharges from the facility have not been monitored since the issuance of the 2001 permit. EPA agrees with CLF that temperature monitoring should be required in the Final Permit and believes that dry weather sampling is appropriate to detect the greatest temperature effect as a result of the discharge of process wastewater from the facility. Therefore, the Final Permit requires monitoring for temperature quarterly during dry weather events in Part I.A.1.

- 2.5 CLF Comment: The TSS limit of 100 mg/L, taken from the Multi-Sector General Permit (“MSGP”) “benchmark” values, may not be appropriate for this facility. A “benchmark value,” for the purposes of the MSGP is a pollutant concentration EPA has determined represents a level of concern that a storm water discharge could potentially impair, or contribute to impairing, water quality or affect human health from ingestion of water or fish. Final Reissuance of National Pollutant Discharge Elimination System (NPDES) Storm Water Multi-Sector General Permit for Industrial Activities, 65 Fed. Reg. 64746 (October 30, 2000). Benchmarks serve two functions under the MSGP scheme – they indicate a potential for human health risk or the environment and in some circumstances trigger further evaluation or corrective action under the MSGP. The fact that benchmarks are set at levels high enough that they indicate a risk of impairment and trigger action regarding the pollutant exceeding the benchmark indicates they are not designed to be used as a routine upper limit for pollutant concentrations. Therefore, CLF requests further analysis to determine whether a TSS lower than 100 mg/L is more appropriate for this facility, and strongly recommends a lower TSS limit.

Response to Comment 2.5: As discussed in the Fact Sheet, the TSS limit of 100 mg/L in the draft permit is derived based on best professional judgment, including the rationale provided in the documentation for the Multi-Sector General Permit. Upon review, EPA believes this rationale is sound. EPA notes that for this facility, TSS concentrations may not be a reliable indicator of sediment loading from the facility due to the tidal influence that occurs in the storm drain system. An average historical concentration from all internal outfalls monitored under the previous permit was 12.5 mg/L. Although the site visit conducted by EPA documented a well-maintained facility, these low average TSS values could potentially be due to the daily tidal flushing that occurs at the facility.

EPA agrees with CLF that the purpose of benchmarks within the MSGP is to trigger review and revision of a facility's SWPPP. While EPA is retaining the maximum daily numerical effluent permit limit of 100 mg/L from the previously issued permit (2001 issuance), EPA also is adding Footnote 5 in Part I.A.1 of the Final Permit as follows: "After collection of two consecutive quarterly samples exceeding 50 mg/L, the Permittee shall review the selection, design, installation, and implementation of BMPs to control sediment under the SWPPP. If necessary, the Permittee shall make modifications to the SWPPP after implementation of proposed control measures to abate sediment loading as required under Part I.B.7". This language additionally enforces the implementation of BMPs as a permit effluent limit to prevent sediment loading from the facility.

- 2.6 CLF Comment: CLF urges EPA to further explain and strengthen the Cyanide parameters, monitoring requirements, research project proposal and clarify why there is no numeric limitation in the permit for Cyanide.

CLF Comment: We also request EPA clarify in the response to comments why there is no numeric limitation for cyanide in the permit. EPA should clarify whether the source of the cyanide is/is not process wastewater.

CLF Comment: CLF also urges EPA to consider adding numeric effluent limitations for additional pollutants based on the monitoring data collected over eight years during the prior permit term. In particular, for metals (zinc exceeded the water quality standard routinely).

Response to Comment 2.6: While process water has not been ruled out as a source of cyanide, the most likely source of cyanide contamination in the facility's discharge is from the infiltration groundwater, which is contaminated due to historic site operations, into the subsurface drainage system. Based on available information and the likely nature of contamination due to infiltrating groundwater, this permit relies on non-numeric effluent limits for certain pollutants in the stormwater discharges while collecting further information. Because there is minimal analytical data, EPA is requiring Distrigas to sample for total cyanide at SD-6 (Detention Basin) quarterly during both wet weather and dry weather periods. This data should provide information so EPA can evaluate the impact to the Mystic River and the need for numeric effluent limitations including consideration of appropriate dilution within the tidal-influenced Mystic River. In the interim EPA is requiring non-numerical effluent limitations on the stormwater discharges by requiring Distrigas to develop and implement a SWPPP which includes best management practices (BMPs) as effluent limits and a Storm Drain Evaluation (special study) to address cyanide.

EPA has issued a memorandum titled "Interim Permitting Approach for Water Quality Based Effluent Limitations in Storm Water Permits," dated September 1, 1996. The memorandum explains the rationale being implemented at this facility and includes the following explanation. The Clean Water Act (CWA) does not require numeric effluent limitations. Section 301 of the CWA requires that discharge permits include effluent limitations necessary to meet state water quality standards. Section 502 defines "effluent limitations" to mean any restriction on quantities, rates and concentrations of constituents discharged from point sources. EPA has, through regulation, interpreted the statute to allow non-numerical limitations (e.g., "best management practices" or BMPs, see 40 CFR § 122.2) to supplement or replace numeric limitations in specific instances that meet the criteria at 40 CFR § 122.44(k). This regulation essentially codifies a court case addressing storm water discharges. *NRDC v. Costle*, 568 F.2d 1369 (D.C. Cir. 1977). In that case, the Court stated that EPA need not establish numeric effluent limitations.

EPA has defended use of BMPs as a substitute for numeric limitations in litigation involving storm water discharges (*CBE v. EPA*, 91-70056 (9th Cir.)(brief on merits)) and in correspondence (Letter from Michael Cook, EPA, to Peter Lehner, NRDC, May 31, 1995). EPA has found that numeric limitation for storm water permits can be very difficult to develop and implement at this time because of the existing state of knowledge about the intermittent and variable nature of these types of discharges and their effects on receiving waters.

Due to the intermittent and variable nature of these stormwater discharges, and the anticipated effectiveness of BMPs to remove contaminated groundwater inflow into the storm drain system, EPA has chosen to use BMPs (i.e., the SWPPP) as a non-numeric effluent limit. The SWPPP must include the proposed methodologies of the Storm Drain Evaluation Study within 90 days of the date of this Final Permit, and in one year include the BMPs developed based on that study. The requirements for the SWPPP include a description of potential pollutant sources, development of stormwater management controls, the formation of a pollution prevention team, development of risk identification and assessment/material inventory list, the development of a preventative maintenance plan, and other requirements. The development of the SWPPP and the implementation of the plan on site should minimize the release of pollutants to stormwater discharges.

- 2.7 CLF Comment: CLF Supports the recommendation of MyRWA that numeric effluent limitations be added to the permit for Benzene (4 ug/l) and BTEX (100 ug/l) as these limits are the standard for petroleum storage facilities in the Boston area. CLF also points out that benzene and BTEX pollutants were detected relatively consistently in the facility's sampling data from 2001-2007, and

therefore numeric effluent limits are more than warranted. In particular, Benzene was consistently detected at levels well above the standard limit of 4 ug/L.

MyRWA Comment: MyRWA requests that limits be instituted for Benzene (4 µg/l) and BTEX (100 µg/l) as these limits are the standard for petroleum storage facilities in the Boston area.

Response to Comment 2.7: Under the current permit, benzene and BTEX (benzene, toluene, ethylbenzene, and xylenes) compounds were measured annually as part of the required priority pollutant scan. Samples were collected during wet weather events and results are summarized in Table 1 below.

The facility does not contain fueling stations; however, vehicles do enter the site to transport liquefied natural gas (LNG). The potential source of benzene at the site is most likely attributed to historic contamination at the site.

Additionally, Distrigas operates the facility as a LNG regasification facility and not as a petroleum storage facility. Numeric limits required in Boston area permits were required for petroleum storage facilities due to the operation and potential release of petroleum hydrocarbons.

Therefore, as described in Response 2.6, EPA has chosen the use of BMPs as effluent limits in this permit rather than numerical effluent limitations for benzene, BTEX, and other compounds. Distrigas is required under Part I.B of the Final Permit to implement necessary BMPs to control the discharge of pollutants in their updated SWPPP. Part I.B.1 of the Final Permit states: “The Permittee shall develop, implement, and maintain a SWPPP designed to reduce, or prevent, the discharge of pollutants through the storm drain system to the receiving waters identified in this permit.” In addition, the Permittee must document the source of specific pollutants and implement necessary BMPs to prevent or reduce the discharge of the pollutant.

Table 1: Summary of Annual Priority Pollutant Scan Results (2001-2008)

Compound	2001	2002	2003	2004	2005	2006	2007	2008
Benzene (ug/L)	11	73	7.6	19	3.3	24	41	25
BTEX (ug/L)	12.2	120.7	13	25.2	3.3	29.1	66.2	30

- 2.8 CLF Comment: Finally, we recommend a reopener clause be added so that a surface retrofit or other action could be required if stormwater contact with contaminated soil is found to be causing the cyanide in effluent.

Response to Comment 2.8: EPA agrees that any new information such as that found as a result of the Storm Drain Evaluation may trigger a

modification of the permit under 40 CFR §122.62(a)(2). Therefore, EPA has added the additional condition to the Final Permit as Part I.B.10: “This permit may be modified in accordance with 40 CFR §122.62(a)(2) and Part II.A.4 to incorporate additional requirements, including new and/or additional specific best management practices or numerical effluent limits, based on the results of the Storm Drain Evaluation.”

3.0 General Sampling

- 3.1 Distrigas Comment: “The outfall is located below the river surface during the tide cycle, except at low slack tide, Quarterly sampling has historically been conducted at 1/2 hour to 1-hour after low slack tide to allow river water to drain from the storm drain system. During this very short window of sampling opportunity, it is not possible to require sampling with the first 30 minutes of discharge from a storm event (Footnote 3 to the table under Condition A.1 and Condition B.6), and not reasonable to require a second sample (to be combined into a single composite sample) to be taken thirty minutes later (Footnote 3 to the table under Condition A.1).”

Response to Comment 3.1: Given the complexity of the tidal effects at the site, necessary antecedent weather conditions, and the sampling methodology, wet weather sampling for parameters included in Part I.A.1 of the Permit shall be required to consist of one (1) grab sample to be collected at slack low tide within the first hour (1-hour) of a rain event that meets wet weather criteria of Footnote 3 of Part I.A.1 of the Permit.

- 3.2 Distrigas Comment: “It is not necessary to require on-site measured rainfall at the time of sample collection and for the total storm event because rainfall amounts may be reasonably estimated based on available and local weather station data, The nearest National Weather Service station is at Logan Airport.”

Response to Comment 3.2: EPA acknowledges the potential errors associated with collecting rainfall data onsite and agrees with the Permittee that weather/precipitation data collected from the National Weather Service and NOAA data from the Logan International Airport station (KBOS) will provide an accurate estimate of precipitation at the facility. Based on the comment from Distrigas, EPA has added Footnote 7 to Part I.A.1 of the permit as follows: “Event total rainfall shall be obtained for the wet weather event during which samples were collected per quarter. Rainfall data shall be obtained from the NOAA KBOS (Boston Logan International Airport) station.”

- 3.3 CLF Comment: CLF understands EPA did not request Distrigas implement a flow gauge because it may not have been physically feasible to use one in this situation but CLF seeks more information explaining this conclusion. It is critical to have the best possible information regarding the volume of water discharged

from the facility, in order to gain some understanding of what mass of pollutants may be discharged from the facility over time.

Response to Comment 3.3: As described in Response 2.5, the storm drain system is influenced by daily tidal fluctuations. The inconsistent flow rates and directions associated with the daily tidal flow in the system makes installation and accurate measurements with a flow gauge impractical.

Operating under the current permit, Distrigas estimated flow based on pipe diameter and flow depth. To more accurately estimate flow, the Permittee shall measure average velocity and flow depth. Cross-sectional area flow (in millions of gallons per day (MGD)) can be calculated based on the collected data to provide an accurate estimate of flow during wet weather and dry weather sampling.

The permit has been changed to clarify requirements for estimation of flow as follows: “Flow rate shall be estimated in accordance with good engineering practices and shall, at a minimum, include measurement of flow velocity and flow depth to calculate flow in millions of gallons per day (MGD).”

4.0 Monitoring Parameters

- 4.1 CLF Comment: CLF recommends the final permit include a requirement to monitor for bacteria. This segment of the Mystic is impaired for pathogens (bacteria and viruses), and both citizen- and EPA-run monitoring efforts have detected significant bacteria pollution problems. Bacteria are commonly found in stormwater runoff from urban areas.

Response to Comment 4.1: EPA agrees that the Mystic River (Segment MA71-03) is impaired pathogens (Final Massachusetts Year 2008 Integrated List of Waters). Given the discharge from the facility to an impaired water, Footnote 8 has been added to Part I.A.1 of the Final Permit to include a wet weather sampling requirement for bacteria (Enterococcus) to be conducted in the 3rd quarter (July to September) to determine if wet weather discharge from the facility contributes to the impairment.

- 4.2 CLF Comment: The 14 priority pollutants that were detected during the prior permit term must continue to be monitored on an annual basis in the draft permit. In addition, CLF urges EPA to require monitoring for the full suite of priority pollutants on an annual basis throughout the life of the permit.

Response to Comment 4.2: As documented in the Fact Sheet, the facility currently resides on a historic manufactured gas plant (MGP). The

historic MGP operations and contamination have been documented and addressed under the Massachusetts Contingency Plan (MCP). The Draft Permit was written to continue annual sampling for only chemical parameters that were regularly detected above method detection limits.

Given the variability for potential pollutants to be present at the site due to the historic activities, EPA agrees with CLF that the permit shall require the full suite of priority pollutants to be analyzed as revised in Footnote 6 in Part I.A.1 of the Final Permit. The Priority Pollutant Scan shall be conducted during the 4th quarter (October to December) during a wet weather event from a sample collected from SD-6 (Detention Basin). The Permittee shall submit the Priority Pollutant Scan with the December DMR, as specified in Part I.C of the Permit which states, **“The results of the annual Priority Pollutant monitoring shall be attached to the DMR for the month of December.”** Additionally, the Permittee shall report the monitoring results on the DMR of the fourteen priority pollutants detected in concentrations above detection limits, as specified in the Table in Part I.A.1 of the Final Permit.

5.0 Stormwater Pollution Prevention Plan (SWPPP)

- 5.1 Comments from Distrigas: “The timelines in the permit specifically regarding the SWPPP seem premature as the SWPPP is predicated on the implementation of BMPs to eliminate free cyanide from the storm water drainage. It is not possible to include BMPs within the SWPPP to address procedures and appropriate measures to control, reduce, and/or eliminate cyanide concentrations with the storm drain discharge without first completing the storm drain evaluation (special study).”

Comments from Distrigas: “To complete BMPs, the Permit requires a ‘special study’ to be completed to understand the process(es) by which free cyanide is currently entering the storm water system. Referring to Section 6.4.4 of the Fact Sheet, this study would be completed within 1-year of permit issuance. Thus, the Permit should be worded and structured such that the SWPPP will be updated after the “special study” completion and implementation of the appropriate BMPs.”

Response to Comment 5.1: The timeframes in the Final Permit, as clarified with changes to Part I.B.5, will not place the Permittee in the position of establishing BMPs for controlling the discharges of cyanide prior to completing its required Storm Drain Evaluation (special study). As required in Parts I.B.2 and I.B.5 of the Final Permit, the Permittee shall complete, certify, and submit to EPA and MassDEP the SWPPP within 90 days of the effective date of the permit. (This timeframe is consistent with the 90 day timeframe for the SWPPP development guidance for industrial operators in the Multi-Sector General Permit.) The methodology for the

Storm Drain Evaluation (special study) shall be fully described in this SWPPP. The Storm Drain Evaluation (special study) shall address cyanide within the storm drain discharge to develop BMPs to reduce cyanide discharges. The Storm Drain Evaluation (special study) shall be completed within one year of the effective date of the permit, consistent with the above comment. This is also the time frame to begin implementation of the BMPs developed in the Storm Drain Evaluation (special study). These timeframes have been clarified in Part I.B.5 of the Final Permit. (See Response 5.4 for new Final Permit language for Part I.B.5.)

It should be noted that the BMPs resulting from the Storm Drain Evaluation (special study) are not the only BMPs to control all potential pollution sources at the facility. For example, Distrigas shall evaluate and propose control measures for good housekeeping practices at the facility to limit the potential for pollution discharges due to all potential contaminants at the site. Distrigas shall consider all available BMPs for the entire facility within the development of the SWPPP.

Consistent with above comment, after completion of the Storm Drain Evaluation (special study), the Permittee shall update or amend the SWPPP with the appropriate BMPs to limit or prevent the introduction of cyanide within the stormwater discharge following procedures outlined in Part I.B.7 of the permit.

- 5.2 MyRWA Comment: MyRWA requests that the Special Study evaluate all Contaminants of Concern outlined in the RTN 3-0308 1999 Phase II report, including but not limited to: benzene, toluene, ethyl benzene, xylenes, polycyclic aromatic hydrocarbons, total petroleum hydrocarbons, arsenic, lead and light and dense non aqueous phase liquids (LNAPLs and DNAPLs).

CLF Comment: CLF supports the recommendation of MyRWA requests that the Special Study evaluate all Contaminants of Concern outlined in the RTN 3-0308 1999 Phase II report specifically: benzene, toluene, ethyl benzene, xylenes, polycyclic aromatic hydrocarbons, total petroleum hydrocarbons, arsenic, lead and light and dense non aqueous phase liquids (LNAPL, DNAPL's).

Response to Comment 5.2: Contaminants of concern reported under the MCP at the site including benzene, toluene, ethyl benzene, xylenes, polycyclic aromatic hydrocarbons, total petroleum hydrocarbons, arsenic, lead and light and dense non-aqueous phase liquids (LNAPL, DNAPL's), are present in both groundwater and soils. Cyanide, based on the results of the annual priority pollutant scan with an average of 564 ug/L, has been consistently higher than water quality limits (1 ug/L). The potential pathways for the contaminants of concern to enter the storm drain system for discharge to the Mystic River are expected to be similar to the

pathways for cyanide. Therefore, EPA has required the use of cyanide as a surrogate for all contaminants of concern potentially present at the site due to historical groundwater contamination. The permit requires Distrigas to conduct a Storm Drain Evaluation (special study) and to implement BMPs to prevent or limit the discharge of cyanide.

- 5.3 MyRWA Comment: MyRWA requests that the Additional Permit Conditions for the Stormwater Pollution Prevention Plan (SWPP, Section 6.5.2) include language to have the SWPP and the Storm Drain Evaluation (Special Study) completed within 90 days of the permit being signed.

CLF Comment: Further, we recommend that Additional Permit Conditions for the Stormwater Pollution Prevention Plan (Section 6.5.2) include language to have the SWPP and the Storm Drain Evaluation (Special Study) are completed within 90 days of the permit being signed.

Response to Comment 5.3: As described in Response 5.1, Distrigas shall complete and submit a SWPPP within 90 days of the effective date of the Permit as required in Part I.B.2. This is consistent with the above comments and has been clarified in Part I.B.2. The SWPPP shall include the methodologies for the required Storm Drain Evaluation (special study). EPA agrees that a timeframe for the completion of the Storm Drain Evaluation (special study) should be added to the Final Permit. Given the complexity of the storm drain system at the site, EPA has established a reasonable schedule for completion of the Storm Drain Evaluation (special study) within 1 year of the effective date of the permit. This has been clarified in the Final Permit in Part I.B.5. (See Response 5.4 for new Final Permit language for Part I.B.5.)

- 5.4 MyRWA Comment: MyRWA requests that the Special Study and its approved recommendations be implemented within 2 years of the signing of the permit.

CLF Comment: CLF also supports MyRWA's recommendation that the Special Study and its approved recommendations be implemented within 2 years of the signing of the permit.

Response to Comment 5.4: EPA agrees that a timeframe for the implementation of the BMPs developed in the Storm Drain Evaluation (special study) should be added to the Final Permit. Given the complexity of the storm drain system at the site, EPA has established a reasonable schedule for implementation of the Storm Drain Evaluation (special study) within one (1) year from the effective date of the permit. This is contained in Part I.B.5 of the Final Permit as follows: "The SWPPP shall specifically address cyanide loading from both overland runoff flow and from groundwater infiltration to the storm drain system. The Permittee shall include in the SWPPP proposed methodologies for the Storm Drain

Evaluation (special study) and shall submit the complete, certified SWPPP to EPA and MassDEP within ninety (90) days of the effective date of the Permit. The Storm Drain Evaluation (special study) shall include all studies, sampling and analyses necessary to develop site-specific BMPs necessary to limit and/or prevent the introduction of free cyanide into the storm drain system. These site-specific BMPs shall be measures to control, reduce, and/or eliminate cyanide concentrations within the storm drain discharge. In addition, the Storm Drain Evaluation shall require evaluation of a mixing zone/dilution factor within the tidal-influenced Mystic River using an appropriate method or model. The Permittee shall submit the completed Storm Drain Evaluation (special study) to EPA and MassDEP within one (1) year from the effective date of this Permit, and the Permittee shall begin implementation the BMPs developed in the Storm Drain Evaluation (special study) no later than one (1) year after the effective date of this Permit. The site-specific BMPs shall be prepared in accordance with good engineering practices, identify potential sources of cyanide to the storm drain system that may reasonably be expected to affect the quality of the stormwater discharge, and describe the practices which will be used to reduce cyanide concentrations and assure compliance with this permit. Within three (3) years from the effective date of this Permit, the Permittee shall implement the site-specific BMPs to control, reduce, and/or eliminate cyanide within the storm drains. Within four (4) years from the effective date of this Permit, the Permittee shall validate the effectiveness of these BMP through sampling and analysis.”

- 5.5 MyRWA Comment: MyRWA requests that a public comment period be scheduled for review of the required SWPP and the included Storm Drain Evaluation soon after these documents are submitted for approval.

MyRWA Comment: MyRWA requests that DISTRIGAS make the results of the Storm Drain Evaluation (Special Study) available to the public, including a schedule of the proposed mitigation efforts. Furthermore, MyRWA requests DISTRIGAS be required to hold a public hearing to allow public comment on these mitigation plans.

CLF Comment: CLF also recommends that DISTRIGAS make the results of the Storm Drain Evaluation (Special Study) available to the public with the mitigation efforts and schedule, and provide an opportunity for public input.

Response to Comment 5.5: EPA has included language in the Final Permit requiring the facility to make its SWPPP and the methodology of the Storm Drain Evaluation (special study) available to the public to the extent allowable by law. Based on the comment from CLF, EPA has revised the permit to read as follows: “The Permittee must retain a copy of the current SWPPP required by the permit at the facility. Unless prohibited by law, the SWPPP must be immediately available to EPA; MassDEP; a local agency

that reviews stormwater management plans; the operator of an MS4 receiving discharges from the site; and representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) at the time of an onsite inspection or upon request. EPA may provide access to portions of the Permittee's SWPPP to a member of the public upon request. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within EPA, USFWS, or NMFS." EPA anticipates providing any non-CBI SWPPP documents to the public upon request and/or posting on the EPA web site.

EPA encourages the Permittee to make a copy of the SWPPP available online. EPA appreciates public input, and at the time the SWPPP is available, EPA will consider soliciting public comment on the SWPPP, including the methodology of the Storm Drain Evaluation (special study) or implementation of the study results.

6.0 General Fact Sheet Comments

- 6.1** Comments from Distrigas: (Page 8 of 22, Section 6.2.4, fourth paragraph) The first sentence should read as follows: "Reports submitted under the MCP to the MassDEP document ~~high~~ concentrations of total cyanide observed in the storm drain system (at locations of SD-2 and SD-3, Figure 2)." The change recommended above is consistent with the data presented in the GEI memorandum dated March 18, 2009, The qualifier "high" is unclear in the absence of a standard and, therefore, may be subject to misinterpretation.

Comments from Distrigas: (Page 8 of 22, Section 6.2.4, fifth paragraph) The last sentence should read: "This, in turn, results in ~~elevated~~ cyanide concentrations at Outfall No. 001 discharging directly to the Mystic River." The qualifier "elevated" is unclear in the absence of a standard and, therefore, may be subject to misinterpretation.

Comments from Distrigas: (Page 9 of 22, Section 6.2.5, second paragraph) Change the first sentence of the second paragraph as follows: "The results of the study suggest that stormwater runoff from the site ~~may have elevated~~ contain cyanide concentrations due to contact with contaminated soils, but were inconclusive because of the sampling techniques and laboratory methods." Use of the qualifier "elevated" is premature until the "Special Study" is completed.

Comments from Distrigas: (Page 9 of 22, Section 6.2.5, second paragraph) Change the last sentence of the second paragraph as follows: "Based on the limited results, EP A concludes that stormwater that has come into contact with contaminated soils at the ground surface and runoff into the storm drain system may also contribute to ~~elevated~~ cyanide concentrations in the effluent discharged at Outfall No. 001. Use of the qualifier "elevated" is premature until the "Special Study" is completed.

Response to Comment 6.1: The Fact Sheet is a final document and thus cannot be revised. If appropriate, EPA utilizes the Response to Comments to clarify statements and/or to correct errors in the Fact Sheet. EPA acknowledges comments on the Fact Sheet from Distrigas and is not convinced these comments change the basis for the conditions in the Final Permit or change any of the conditions in the Final Permit. Regarding the use of 'elevated' and 'high' in the Fact Sheet, the terms were used as a comparison relative to water quality standard levels of 1 ug/L. Average total cyanide concentrations from the annual priority pollutant scans at SD-6 for the time period of 2001 to 2007 was 564 ug/L. Comparatively, the average concentrations are greater than water quality standard levels.